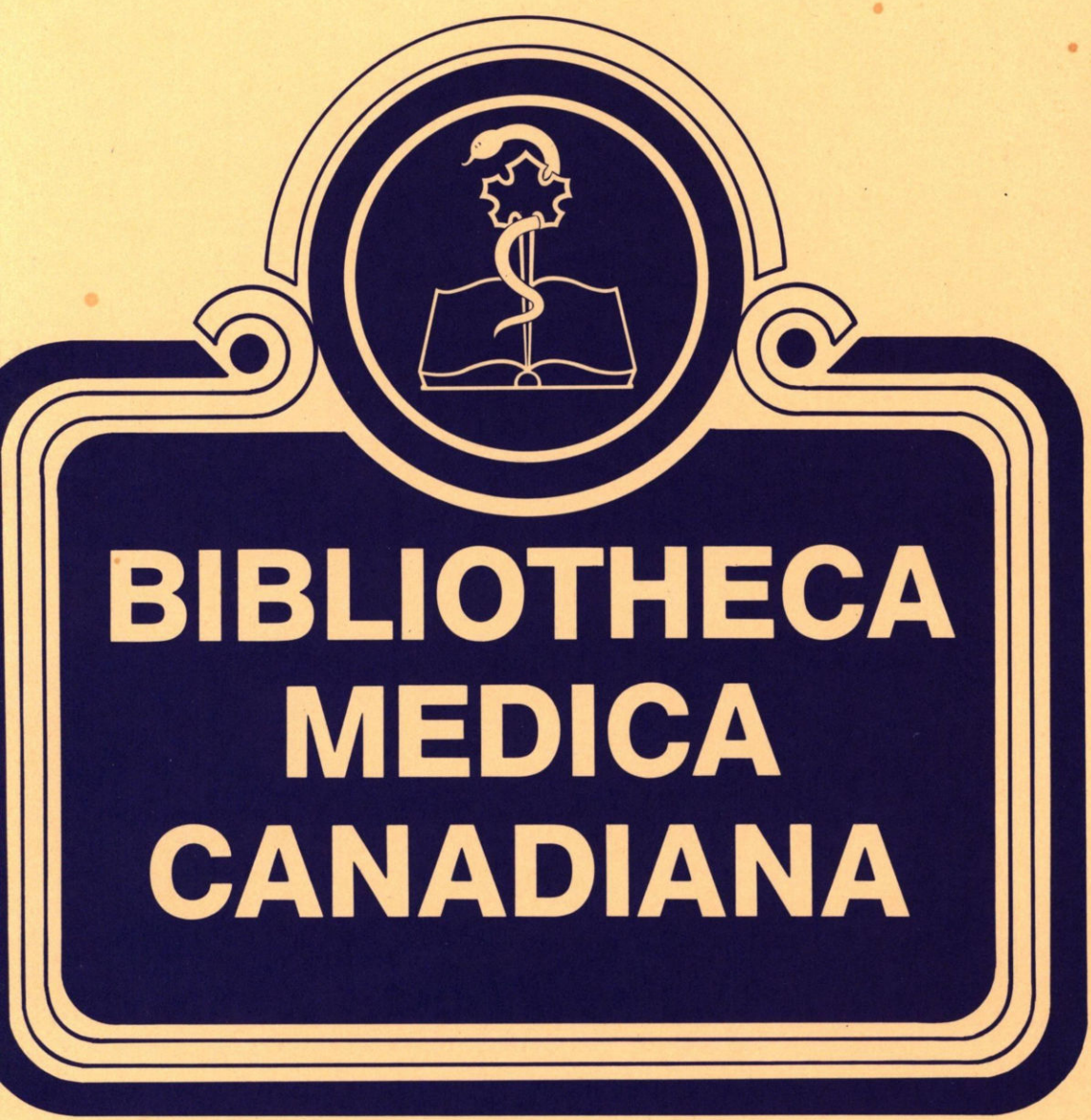

BIBLIOTHECA MEDICA CANADIANA

VOLUME 10 NUMBER 2 1988 ISSN 0707 - 3674

INFORMATION FOR CONTRIBUTORS / AVERTISSEMENT AUX AUTEURS

The **Bibliotheca Medica Canadiana** is a vehicle providing for increased communication among all health libraries and health sciences librarians in Canada. We have a special commitment to reach and assist the worker in the smaller, isolated health library. Contributors should consult recent issues for examples of the type of material and general style sought by the editors. Queries to the editors are welcome. Submissions in English or French are welcome.

La **Bibliotheca Medica Canadiana** a pour objet de permettre une meilleure communication entre toutes les bibliothèques médicales et entre tous les bibliothécaires qui travaillant dans le secteur des sciences de la santé. Nous nous engageons tout particulièrement à atteindre et à aider ceux et celles qui travaillant dans les bibliothèques de petite taille et les bibliothèques relativement isolées. Si vous désirez nous soumettre un manuscrit, vous êtes prié de consulter quelques livraisons récentes de la revue pour vous familiariser avec le contenu et le style général recherchés par la rédaction. La rédaction recevra avec plaisir vos questions et observations. Les articles en anglais ou en français sont bienvenus.

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INFORMATION FOR CONTRIBUTORS

MANUSCRIPTS

The editors of **Bibliotheca Medica Canadiana** welcome any manuscripts or other information pertaining to the broad area of health sciences librarianship, particularly as it relates to Canada.

Contributions should be submitted **in duplicate** and the author should retain one copy. Contributions should be **typed double-spaced** and **should not exceed six pages or 2100 words**. Pages should be numbered consecutively in arabic numerals in the top right-hand corner. Articles may be submitted in French or in English but will not be translated by the editors or their associates. Style of writing should conform to acceptable English usage and syntax; slang, jargon, obscure acronyms and/or abbreviations should be avoided. Spelling shall conform to that of the **Oxford English Dictionary**; exceptions shall be at the discretion of the editors. Contributors who wish to submit their work in machine-readable format should contact the editors in advance to ensure that compatible equipment is available in the editorial offices.

All contributions should be accompanied by a covering letter which should include the author's (typed) name, title and affiliations, as well as any other background information that the contributor feels might be useful to the editorial process.

REFERENCES

All references should be given in the Vancouver style; see **Canadian Medical Association Journal** 1985;132:401-5. Contributors are responsible for the accuracy of their references. Personal communications are not acceptable as references. References to unpublished works shall be given only if obtainable from an address submitted by the contributor.

ILLUSTRATIONS

Any illustrations or tables submitted should be black and white copy camera-ready for print. Illustrations and tables should be clearly identified in arabic numerals and should be well-referenced in the text. Illustrations and tables should include appropriate titles.

AVERTISSEMENT AUX AUTEURS

MANUSCRITS

Les rédacteurs de la **Bibliotheca Medica Canadiana** sont à la recherche de manuscrits ou d'autres renseignements portant sur le vaste domaine de la bibliothéconomie dans le contexte des sciences de la santé. Nous recherchons tout particulièrement des articles relatifs à la situation au Canada et à des thèmes d'actualité.

Les articles devraient être remis **en deux exemplaires** et l'auteur devrait en garder une copie. Les articles devraient être **dactylographiés à double interligne et ne devraient pas dépasser six pages ou 2100 mots.** Prière de numéroter les pages consécutivement en chiffres arabes en haut de la page à droite. Les articles peuvent être remis en français ou en anglais, mais ils ne seront pas traduits par la rédaction ni par les associés de la rédaction. Le style d'expression écrite se conformera à l'usage et à la syntaxe acceptables du français; il est préférable d'éviter l'argot, les sigles et autres abréviations obscures. L'ortographe se conformera à celle du **Robert**; les exceptions à cette règle seront à la discrétion de la rédaction. Les auteurs qui désirent remettre leurs manuscrits sous forme électronique devraient communiquer à l'avance avec la rédaction afin de s'assurer que l'équipement compatible est disponible aux bureaux de la rédaction.

Tout article devrait s'accompagner d'une lettre explicative fournissant les informations suivantes: nom de l'auteur (dactylographié), son titre et lieu de travail, ainsi que tout autre détail que l'auteur jugerait utile à la rédaction.

REFERENCES

Toute référence devrait être citée selon le style dit de Vancouver; voir le **Journal de l'Association médicale canadienne** 1985;132:401-5. Les auteurs sont responsables de l'exactitude de leurs références. Les communications de nature personnelle ne sont pas acceptables comme références. Il ne faut citer une référence à un ouvrage inédit que si ce dernier est disponible à une adresse indiquée par l'auteur.

ILLUSTRATIONS

Les illustrations et les tableaux doivent être en noir et blanc, et prêts à l'impression. Les illustrations et les tableaux doivent être clairement identifiés en chiffres arabes et avoir des renvois clairs dans le corps du texte. Les illustrations et tableaux doivent comporter des titres pertinents.

BIBLIOTHECA MEDICA CANADIANA NEWSGATHERING FORM

The editors welcome news items from members of the Canadian Health Libraries Association, or any news that may be of interest to members. Please feel free to copy this form in any way for submission, and to attach separate sheets for lengthy items.

APPOINTMENTS Who
HONOURS? What
AWARDS? When
Where

PROMOTIONS? Who
MOVES? From
RESIGNATIONS? To
When

SEMINARS? What
WORKSHOPS? When
Where

PUBLICATIONS? What
BOOK REVIEWS? Where
Citation

ACQUISITIONS? What
GIFTS? Why
GRANTS? Amount
Donor

TRIPS? Who
LECTURES? Where
VISITORS? When
Why

From:

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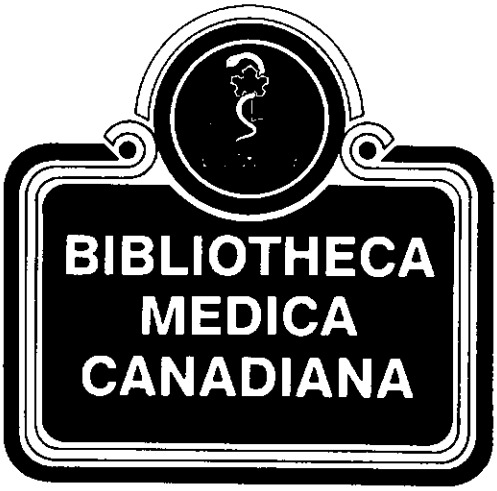
To:
J. Claire Callaghan, Editor
Bibliotheca Medica Canadiana
Education Library, Althouse College
University of Western Ontario
London, Ontario N6G 1G7

BIBLIOTHECA MEDICA CANADIANA



volume 10, number 2 1988

CONFERENCE PAPERS

The **Bibliotheca Medica Canadiana** is published 4 times per year by the Canadian Health Libraries Association. Opinions expressed herein are those of contributors and the editor and not the CHLA.

Bibliotheca Medica Canadiana est publié 4 fois par année par l'Association des Bibliothèques de la Santé du Canada. Les articles paraissant dans **BMC** expriment l'opinion de leurs auteurs ou de la rédaction et non pas celle de l'Association.

CP/BOX 434
Station K
Toronto, Ontario
M4P 2G9

... continued

NEWS AND NOTES

FROM THE EDITORS

Welcome to the first issue of **Bibliotheca Medica Canadiana** edited by yet another team! We are both excited and overwhelmed by our enlarged responsibilities. Mastering CHLA/ABSC's sophisticated software and hardware is perhaps the greatest challenge of all...

We would like to thank David Le Sauvage for he has masterfully configured our newly acquired WordPerfect 5.0 to accept the Hewlett Packard AD Soft Fonts which give us an additional two typefaces in a range of point sizes and the international character set necessary for French text. Version 5.0 and the new fonts allow for a more professional appearance. David's involvement with both volumes 9 and 10 qualifies him for honorary membership in the CHLA/ABSC!

Special thanks is also extended to Lynn Dunikowski, **BMC**'s previous editor, for her counsel, support and good humour ... in spite of her having to forfeit the laser printer at the end of her "reign". Past editors, such as Lynn, Tom Fleming, Jan Greenwood, Bonnie Stableford and, alas, P.J. Fawcett (for those of you who are "new" to our Association, P.J. was our first, and perhaps most colourful, editor), have set an example to the readership which may prove difficult to follow.

Much of this issue is devoted to papers which were presented at the 12th annual meeting in Halifax in June 1988. These papers are informative and thought-provoking. David Horrobin's paper on "Scientific Medicine: Success or Failure?" should generate a great deal of discussion. "The IAIMS Program" by N. Broering is both timely and relevant to our members in academic medical library settings.

Original articles, letters to the editors, and "news and notes" are always appreciated. Future issues depend on your involvement... Continue to support your Association!

Claire Callaghan
Editor

Linda Wilcox
Assistant Editor

LETTER TO THE EDITORS

ENVOY codes are in abundance and yet they are difficult to locate. I would like to suggest that all of the CHLA/ABSC members list their ENVOY library identification and/or personal codes with the National Library for inclusion in future issues of **Bibliotech.**

If your library is using ENVOY 100 or iNET 2000 for **ILL communication,** please send a message via ENVOY or iNET to USER **ID: DUSSAULT.N** and include the full name of your institution, your user ID and the Canadian library symbol assigned to your library.

Institutions/libraries wishing to submit your electronic messaging service identification used for **administrative purposes** should send your listing to USER **ID: GAUTHIER.CA** or mail to:

Chantal Gauthier
Editor, **Bibliotech**
National Library of Canada
395 Wellington Street
Ottawa, Canada
K1A 0N4

Thank you for including this "suggestion from the field" in an upcoming issue of **BMC.**

Kathy Eagleton
Brandon General Hospital
Brandon, Manitoba

A WORD FROM THE PRESIDENT

Bill Maes

Head, Public Services
Medical Library, University of Calgary
Calgary, Alberta

"ONE PICTURE THAT'S WORTH 16.3 TRILLION WORDS."

This is the caption on a poster hanging in my office which displays a highly magnified picture of the Intel 80386 microprocessor currently being used in some of the newest personal computers. The advertisement clarifies the caption by saying that the new chip can manage an eight page personal history of every living person on earth or the equivalent of some 32,000,000,000 pages. (That is not a typo!)

In my office I also find an advertisement from RIS, the producers of "Reference Manager" personal bibliographic software, offering to send me weekly disks with full bibliographic information and abstracts of articles appearing in 200 of the most prominent health sciences journals. With the click of a button I am told I can incorporate pertinent citations directly into my personal database ready to be retrieved on command. Another blurb from Cambridge Scientific Abstracts is offering to send me a free CD-ROM reader for my PC if I will subscribe to their Medline database soon to be produced with monthly updates and full search capabilities. A researcher has just called to ask if I would like to see the programme he has created which fully indexes the curriculum core documents for the medical students and another called yesterday to arrange for a series of seminars which would teach residents to access Medline by themselves when it is convenient to them. I also recall reading somewhere recently that a major publisher is experimenting with putting the full text of some 50 of its medical journals on a compact disc for weekly distribution to whomever will subscribe.

My poster reminding me that one chip can manage 16.3 trillion words (how many librarians would that take?), the questions I

am asked, and the advertisements which arrive daily on my desk, tell me unequivocally that the days of the "traditional" librarian are numbered if they are not already past.

If you are being ignored by your administrator or feel that your clientele are not as supportive as they once were, the answer is all around you. More and better alternatives to what libraries serving the health professions have traditionally offered are available, and the little microprocessor which handles 5,000,000 instructions per second, reminds me the revolution is only just beginning.

In recognition of these changes and the urgent need for all of us to examine our current position and purpose in this environment, CHLA/ABSC issued the following position statement at the Halifax AGM:

CHLA/ABSC endorses and encourages the full participation of its members and member organizations in the use and development of information technology as a means of enhancing the acquisition, organization, and dissemination of information in order to support as effectively and efficiently as possible the information needs of health care providers.

We, who purport to be preeminent in the role of information organizers and disseminators, cannot afford to stand idly by as commercial vendors and our former patrons, taking full advantage of what technology has to offer, unwittingly make us redundant. The answer is not to resist the challenge but to use it to our advantage. Do not be an observer but become part of the revolution. Try to find innovative ways to use the technology and be master of your own house. Beg, borrow, or steal a microcomputer. Learn about modems, telecommunications, file transfer, LANs, busses and hypertext. Your survival as an information provider and the viability of our Association may well depend on it!

P.S. In my welcome to new Board members in the last issue I regrettably neglected to mention our President Elect, Donna Dryden. I suppose I can be excused for this oversight on the grounds that Donna has been so involved with the Association and Board in the past that she hardly seems like a "new" member at all. Welcome Donna!

QUELQUES MOTS DU PRESIDENT

Bill Maes

Chef des services publics
Bibliothèque médicale, Université de Calgary
Calgary, Alberta

"UNE IMAGE QUI VAUT 16.3 TRILLIONS MOTS"...

Ceci est le sous-titre sur une affiche dans mon bureau, une affiche qui démontre une image très agrandie du microprocesseur Intel 80386 qui figure maintenant dans les ordinateurs personnels les plus nouveaux. L'annonce clarifie le sous-titre en disant que le nouveau composant électronique peut administrer une biographie personelle de huit pages de tous les êtres qui vivent actuellement sur la terre--ce qui équivaut à peu près 32 000 000 000 pages. (Ce n'est pas une faute de frappe!)

J'ai aussi dans mon bureau une annonce de RIS, les producteurs de "Reference Manager", le logiciel de bibliographie personnelle, qui offre de m'envoyer chaque semaine des disquettes d'information bibliographique complète et des résumés d'articles publiés dans 200 des journaux scientifique médicaux les plus reconnus. On me dit qu'avec le déclic d'un bouton je peux incorporer des citations pertinentes directement dans ma base de données personnelle prêtes à être extraites sur commande. Un autre publicitaire de "Cambridge Scientific Abstracts" offre de m'envoyer gratuitement un lecteur CD-ROM pour mon ordinateur personnel si je m'abonne à leur base de données "Medline" qui sera publiée prochainement, qui donnera mensuellement des mises à jour, et qui a des capacités complètes de recherche.

Un chercheur vient de m'appeler pour me demander si j'aimerais voir le programme qui'il vient de créer, un programme qui donne un index de documents essentiels du curriculum des étudiants en médicine; et un autre m'a appelé hier pour organiser une série de colloques ayant pour but d'enseigner aux internes la technique d'accès au Medline quand ceci leur convient. Je me souviens

aussi d'avoir lu récemment à quelque part qu'un éditeur fait des essais en mettant le texte complet d'à peu près cinquante de ses journaux médicaux sur disque pour distribuer chaque semaine à quiconque s'abonne.

Une affiche qui me rappelle qu'un composant électronique peut manier 16.3 trillion mots (ceci prendrait combien de bibliothécaires?), des questions qu'on me demande, et des anonces qui arrivent quotidiennement à mon bureaux--tout ceci me dit sans equivoque que le temps des bibliothécaires "traditionnels" est compté, sinon passé.

Si le problème est que votre administrateur vous ignore ou que vous sentez que votre clientèle ne vous soutient plus comme auparavant, la solution est proche. Des alternatives plus nombreuses et meilleures que ce que nous offraient traditionnellement les bibliothèques de professions du bien-être sont maintenant disponibles; et le petit microprocesseur qui manie 5 000 000 instructions la seconde me rappelle que la révolution vient de commencer.

En reconnaissant ces changements et en reconnaisssant le besoin important que nous avons tous à examiner notre position actuelle et nos buts dans cet environnment, CHLA/ABSC a fait la déclaration suivante à la réunion annuelle à Halifax:

CHLA/ABSC appuie et encourage la pleine participation de ses membres de ses organisations-membre dans l'utilisation et dans le développement de la technologie de l'information de la technologie comme moyen de faire accroître l'acquisition, l'organisation et la dissimilation de l'information ayant pour but de soutenir aussi effectivement et efficacement que possible les besoins d'information qu'ont les pourvoyeurs des soins médicaux.

Nous qui prétendons être prééminants comme organisateurs et dissimilateurs d'information ne devons pas ne rien faire pendant que les vendeurs commerciaux et nos anciens clients, sachant prendre avantage de ce que la technologie leur offre, nous rendent, sans le savoir, redondants. Nous ne devons pas résister au défi; nous devons nous servir de ce défi à notre avantage. Nous ne devons pas être observateurs mais plutôt révolutionnaires. Essayons de trouver des moyens innovateurs pour nous servir de la technologie et d'être maîtres chez nous. Emparrons-nous d'un micro-ordinateur à tout prix. Renseignons-nous sur les modems, sur la télécommunication, sur les transfers de fichiers, sur le réseau local ("LAN"), sur les bus et sur l'hypertexte. Sur ceci peut bien dépendre notre survivance comme responsables de la dissimulation de l'information et la viabilité de notre Association!

p.s. En souhaitant la bienvenue aux nouveaux membre du Comité dans le dernier numéro, j'ai malheureusement négligé de mentionner le nom de notre présidente désignée, Donna Dryden. On m'excusera certainement de cet oubli parce que Donna s'est déjà si fortement liée à l'Association et au Comité qu'elle ne semble pas du tout être "nouvelle". Bienvenue, Donna!

REPORT FROM THE CHLA/ABSC TASK FORCE ON HOSPITAL LIBRARY STANDARDS

Jan Greenwood, Chair

Manager of Library Services,
Ontario Medical Association,
Toronto, Ontario

The Task Force is pleased by the response to its questionnaire mailed during July and would like to thank the respondents for their prompt cooperation.

Completed questionnaires have been submitted from a wide geographic area as follows:

Alberta	27
B.C.	6
New Brunswick	1
Nova Scotia	4
Manitoba	11
Ontario	50
P.E.I.	1
Quebec	6
Saskatchewan	3

It was not possible to locate the origin of a few of the submitted questionnaire.

As might have been expected, a preliminary examination of the data suggests that there are some regional discrepancies, but what is really striking is that the vast majority of responding libraries offer most, if not all, of the services listed on the questionnaire. Given that few libraries meet existing quantitative standards for staffing levels (CANADIAN STANDARDS FOR HOSPITAL LIBRARIES, MLA, N.Y. etc) this is an impressive testimony to the dedication of hospital library staff in Canada.

At its November meeting the Task Force will attempt to derive from the submitted data quantitative standards for hospital libraries that are rooted in reality but serve also to ensure excellence of access to health information in Canadian health care facilities.

SCIENTIFIC MEDICINE: SUCCESS OR FAILURE? THE ROLE OF THE LIBRARIAN AND INFORMATION SCIENTIST *

David F. Horrobin, MA, DPhil, BM, BCH.

Managing Director
Efamol Research Institute
Kentville, Nova Scotia

The medical research enterprise is one of the most respected of modern institutions. Its budget is the only one which is consistently increased by the US Congress over and above the amount requested by the US Administration. Medical research has avoided the criticisms being voiced about medical practice. We may not like the ways in which many doctors treat us, but who could be opposed to spending money on finding better ways to treat and to prevent cancer and other diseases? That is a "motherhood" issue if ever there was one!

Heretically, I am going to suggest that our confidence is misplaced. Over the past 25-30 years medical research has rather spectacularly failed to deliver what is expected of it -- new and successful treatments which stop people dying and improve the quality of life.

Somewhere around the years 1958-1962 there occurred a watershed in the history of medical research. Prior to 1960 medical research in most countries was small-scale, poorly funded and carried out by a small band of dedicated researchers. Most of the individuals involved would have been doing research even if they had been paid nothing, so passionately involved were they in what they were doing. Certainly in the 1940s and 1950s this was an accurate picture. But throughout the 1950s, pressure on politicians and charitable organizations to put more money into research and to develop proper career structures for researchers had been growing steadily. The shock of Sputnik stimulated Western governments to pour money not only into space investigations but into all types of research. By 1960 this money was flowing into medicine. Medical research was becoming a structured edifice with abundant funds and a proper career structure. Since then the largesse has hardly paused. Scientists have grumbled -- as they always do -- but the increase in funding has consistently outstripped inflation and in real terms the medical research enterprise is three to five times larger than it was in 1960.

THE SUCCESS OF MEDICAL RESEARCH

I would like to contrast the situation in

* *This keynote paper was presented at the 12th annual meeting of the CHLA/ABSC, June 11-15, 1988 in Halifax, Nova Scotia.*

1960 with that in 1932, 28 years earlier, and that in 1988, 28 years later. In 1932 medicine as we know it, particularly in relation to drug treatment, hardly existed. Salvarsan had weak anti-syphilitic activity but, otherwise, we were as powerless against bacterial diseases as we had been in the 19th century. Immunisations against viral diseases were in their infancy and polio was a dreaded plague. Drug treatment for psychiatric disorders, for cancer, for hypertension and for a host of other disorders was effectively non-existent.

Then, in 1935, began what can only be called a miraculous quarter century of dramatic progress. It started with Domagk in Germany. He believed that sulphonamides would be effective antibacterial agents and was forced to test them prematurely in humans because his daughter was dying of bacterial infection. Domagk used his drug, his daughter survived and the era of modern chemotherapy began. Five years later, Florey's team developed for clinical use the much more powerful penicillin. Within a few years, streptomycin, tetracycline and a whole range of new antibiotics followed. In the late 1940s and 1950s, treatment of tuberculosis became available to everyone, polio largely disappeared because of the new vaccines and a whole range of new drugs of use in psychiatry, in cardiovascular disease, in cancer, in kidney disease and in other disorders became available. By 1960 the world of medicine was very different from that world in 1932. The string of almost unbroken success had made medical research confident of tackling the remaining problems quickly.

Twenty-eight years later, in 1988, we have not gone much further. We have many more drugs but almost all are derivatives or developments of compounds already known by 1960. In only very limited situations is the patient receiving the best medical care in 1988 likely to live longer or suffer less than the patient receiving the best medical care in 1960. With the exceptions of the childhood cancers and the cancers of the lymphoid system we have essentially lost the war on cancer. The apparently increased survival of cancer patients is an illusion based on earlier diagnosis without changing the date of death. Even the drugs which do work in cancer are largely the ones which were already available in 1960. We have simply learned to use them better.

Only in two common conditions, peptic ulcer and renal failure, have treatments largely or completely unknown in 1960 had an important effect on morbidity or mortality. Dialysis and transplantation have revolutionised the treatment of renal failure and the H2 antagonist drugs have transformed our approach to peptic ulcer. Otherwise, the vast expenditure on medical research has simply not been translated into clinical success when the fundamental yardsticks of patient comfort and patient survival are used. Our patients live and die much more expensively than they did, their lives and deaths are documented in exquisite detail by a myriad of sophisticated tests and techniques - but die they do and at ages and in degrees of comfort which have hardly changed.

REASONS FOR FAILURE AND THE ROLE OF THE MEDICAL LIBRARIAN

Why should this be? Why have the years since 1960 been such relative failures when compared with the quarter century

before? How can this have happened when from 1960 to 1988 we published so many more papers and spent so much more money than we did previously? Is it just bad luck, or could bad judgement be involved? And if there has been bad judgement, what can a librarian or information scientist do to improve things?

The usual reason given for failure is that all the easy problems have been solved. Those that remain are much more difficult and will take much longer. There is no way of knowing whether this is true and it is certainly not the message that the medical research establishment conveys to the public when seeking funds. We cannot exclude the possibility that we are simply going about things in the wrong way. My prejudice is the latter. I think our approach to medicine has gone sadly wrong. I also believe that it has gone wrong in ways which relate intimately to how we use information. Medical librarians have major roles to play in helping to put things right.

1. Medical research has in large part ceased to be about medicine.

About ten years ago I met a young virologist whose research was being supported by a multiple sclerosis charity. He was studying the effects of viral infections on cultured nerve cells. I asked him whether his work had anything to do with multiple sclerosis. He said no, not at all, but there was the distant possibility that something he discovered might in some way throw light on the disease. I asked him whether he had ever seen a patient with multiple sclerosis. He shook his head. I asked him whether he had ever read a book or a paper about multiple sclerosis in humans. He shook his head again. I was appalled because he was using money collected at great cost by thousands of volunteer helpers. I said, "How on earth are you going to know whether or not you have discovered something relevant to multiple sclerosis when you seem totally uninterested in the disease in humans?" He had no answer.

Since then I have made a practice of asking similar questions of scientists who claim that they are doing work which one day may be relevant to cancer, or to muscular dystrophy, or to heart disease, or to some other illness. Depressingly frequently, the answers are the same. The researcher has not bothered to find out anything about the disease on which he or she is supposed to be working. The researchers mention the possible relevance to disease on their grant applications in order to solicit funds from gullible organizations, but they clearly have no faith or interest in the possible clinical relevance of their studies.

One thing I try to do with my own research team is constantly make them aware of the human problems related to their research. And, medically qualified or not, they almost invariably become fascinated by what they learn and begin to think about the clinical relevance of what they are doing. I believe that medical librarians can play a similar role. They should try to identify the clinical problems on which the researchers are supposed to be working and make sure that a constant flow of clinical information reaches those researchers. In this way I believe that both librarian and scientist will find their work more interesting -- and may make it more successful.

2. Medical research has ceased to be about the whole patient.

Many medical researchers have ceased to think about the patient as a whole. This is merely a reflection of the increased specialisation of medical practice which has also all too often ceased to be interested in the whole being. Research problems have become skin problems, or kidney problems, or heart problems, or mind problems rather than people problems. The non-psychiatrists rarely consider the impact of the bodily disorder on the mind. The psychiatric researchers rarely think about the impact of the mind on the body.

This attitude is obviously a serious mistake when it comes to medical practice. There is increasing pressure on doctors to take the whole patient into consideration and medical behaviour is changing, albeit too slowly. But I believe that the narrow approaches are equally mistaken in research. To look at a research problem in medicine as related to a single organ system is often to miss vital clues.

Consider one example, schizophrenia. Schizophrenia is "obviously" a disease of the mind. Countless novels, countless medical texts and countless treatment programmes have been based on that assumption. Yet consider some facts about schizophrenia that most psychiatrists do not know. When they do learn these facts, the medical scientists can never look on schizophrenia in the same way again. Schizophrenics get better psychiatrically when they have a feverish illness and worsen again when that physical illness gets better. Schizophrenics rarely get rheumatoid arthritis. Schizophrenia does not develop in people who are blind from birth. When histamine is injected into the skin of a schizophrenic, the size of the inflamed area is only half that seen in normal people.

A valid theory of schizophrenia has to explain not only the psychotic disorder but also these other observations. Researchers thinking about schizophrenia only in terms of the mind develop all sorts of theories which are obviously nonsense when these facts are known. These facts have a major role in limiting the types of theory which are valid, and also in stimulating innovative thought about the disease.

I believe that medical librarians could play a major role in helping researchers break out of their own specialized insularity. The librarians should seek out this type of information and force the scientists to become aware of it. It is precisely that information which does not fit which is frequently the clue to finding an answer.

3. Medical research has ceased to be interested in history.

One major change which has taken place over the 25 years during which I have been actively involved in research, is the loss of scientists who have a keen historical sense. In 1960 most medical scientists were very much aware of the historical basis of their subject. This had a number of beneficial effects. First it induced a sense of humility: the researcher was aware of the generations of past investigators, many of whom were totally convinced that they had reached the truth, only to see their concepts overturned by the next generation of scientists -- and then perhaps reinstated the generation after that. Such historical perspective induces a sense of real humility

concerning the fragility of human knowledge. This humility is all too often lacking in modern investigators who are convinced that current science has all the answers -- or will have soon -- and that historical knowledge is nonsense.

Second, the awareness of history ensured that knowledge was not lost. There are two views of the progress of science. One is that of a major building slowly and steadily being built up from its foundations. The second, due to Isaac Newton, is that of a vast beach from which an investigator almost at random chooses a few pebbles to investigate. On the first view, it is unlikely that anything important, once known, will be lost. On the second view, anything that is known can be lost all too easily if scientists lose interest in it. One may or may not be able to make a case for the view that physical science conforms to the first model. But there can be no doubt that medical science is better described by the second. The history of medicine is full of examples of soundly based knowledge which has simply been lost. For example, for fifty years at the end of the 19th century and the beginning of the 20th, the knowledge that scurvy was caused by a lack of a nutrient present in certain foods was simply lost. The observation that mad people often become mentally better when they have a fever is one of the oldest observations in medicine. It was noted by Hippocrates and by Galen and by all the great names of 18th and 19th century medicine. In the 1920s every psychiatrist knew about it and in 1926 Wagner-Jauregg won a Nobel Prize for his work on it. Yet today, if you ask a hundred North American psychiatrists, you will be lucky to find one who is aware of this knowledge.

In part this state of affairs is the result of intellectual arrogance and intellectual laziness on the part of most medical scientists. But it is also in part attributable to the superbly efficient computerized data bases provided by medical librarians and information scientists. I would like to suggest that these marvellous data bases have one major flaw. They do not go back far enough and they contribute to the appalling and damaging illusion that all that is important in science has happened in the past 10 or 20 years.

In the early 1960s, when I wanted information I had no alternative but to do the search myself. There were no data bases and so no cut off points for date of entry. I followed a literature trail by its logic and not by some arbitrary temporal cut off date. So I would frequently end up in the basement of the library browsing in the stacks which had journals from the 1880s or earlier. One thing I learned which I have never forgotten is that if you want a full description of a disease with nothing left out you will do far better to go back to the old literature. The observers had a due sense of humility and a proper attitude to the whole person so that little was left out.

The proliferation of current research activity means that all too often the printouts resulting from searches do not even go back to the first date on the data base. They will often go back only 5 or 10 years, reinforcing the illusion that everything of importance has been done recently. This is a disastrous mistake. Things can be forgotten, they are being forgotten, and medical research is less effective because of it.

One often gets the impression that medical librarians believe that the most important problems facing the profession relate to how quickly and how comprehensively current information can be entered into the system. How quickly can the information be entered, and how effectively can one access sources of information such as books, grant applications and abstracts of meeting proceedings which in the past were often not put into the data base? I believe that this extreme enthusiasm for the immediately current is misplaced. The most important task is to take the data bases back in time, beyond 1973, or 1966 or whenever the particular system began. If this is not done, vast amounts of information will simply become inaccessible to the modern medical scientist. This is not only a tragedy, it is a crime because it wastes the enormous efforts made by generations of dedicated investigators. If each librarian made it his or her task to take one area of medical science and to create a data base in that area going back to the 19th century, then I believe that medical research would gain an invaluable resource.

4. Medical scientists are ceasing to be interested in the foreign literature.

Surprising though it may seem, medical science was often more international fifty years ago than it is today. Particularly in North America, medical science seems to be becoming more and more insular and arrogant and to take less and less interest in what is happening elsewhere. You can verify this by looking at the reference lists in North American papers published in the 1930s and comparing them with the lists in papers done in the 80s. Citation analysis confirms the trend. North Americans seem to have forgotten that the great majority of the key concepts in medical science originated elsewhere. North Americans have been brilliant in developing concepts originated elsewhere, but in medicine have not been notable for opening up major new fields of investigation. The evidence that North Americans are referring less and less to work published elsewhere is worrying evidence of increasing insularity. Innovative concepts can come from anywhere. It is important for medical librarians to insist that the researchers with whom they work are fully aware of what is being done on other continents.

5. Medical scientists are ceasing to read the journals themselves.

Not infrequently when I have been working in a library, the paper which has caught my attention and changed my way of thinking is not the paper for which I have been specifically searching. It is the paper which comes one or two papers before, or one or two after, the one I was looking at. For example, the interaction between schizophrenia and inflammatory disease, a major interest of mine, was triggered quite accidentally by a paper seen in this way. The efficiency of current information systems, whereby only the papers which are specifically sought are placed on the investigator's desk, is reducing the likelihood of accidental discoveries made in this way.

In their eagerness to provide a superb and precise service, it is important for medical librarians not to forget that precision can in some situations also be a disservice. All scientists should be exposed to papers for which they have not specifically asked. All scientists should therefore be encouraged

regularly to browse through at least some journals in their entirety. Who knows what they might discover?

CONCLUSION

The medical librarian and information scientist have major roles to play in getting medical research back to the sort of productivity seen in that golden quarter century from 1935 to 1960. It is important not to forget that the efficiency and precision of modern information science can at times be a disservice, unless deliberate steps are taken to counteract some of the negative aspects of such a superb service.

THE IAIMS PROGRAM *

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It is an honour and privilege to have been invited today to participate in the annual meeting of the Canadian Health Libraries Association (CHLA). Your meeting theme, "From Sea to Sea", is especially appropriate to my presentation on IAIMS, because I believe the impact of this initiative is pertinent to our entire continent. In fact, IAIMS has applicability internationally to other continents.

When Ann Manning, the CHLA Programme Chairman, invited me to speak, she said, "please tell us everything about the IAIMS program at Georgetown and everything you plan for the future". I know the last thing you want to hear is a long speech covering "everything". So, I decided the best way of handling this monumental assignment is to answer questions that you have about IAIMS. I also know you probably do not have a list of questions, so I prepared questions that I can answer which may give you insights on how IAIMS may apply to your institution.

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* *This paper was presented at the 12th annual meeting of the CHLA/ABSC, June 11-15, 1988 in Halifax, Nova Scotia.*

THE FIRST QUESTION IS, WHAT IS IAIMS?

An Integrated Academic Information Management System (IAIMS) is a mechanism for providing effective electronic access to information essential for clinical decision making, biomedical research and health sciences education. Effective access can be achieved if a broad range of biomedical information is made available at the place where it is needed, when it's needed (e.g. in the health practitioner's office and at the patient's bedside). Such information can come from multiple sources, in many formats. It can include patient laboratory test results, X-rays, patient demographic data, information on drug interactions, library materials from journals and texts, existing databases on treatment protocols and outcomes, and software programs for clinical diagnosis.

There is a growing body of literature on IAIMS. The best sources for articles are the Bulletin of the Medical Library Association, July 1986 and July 1988, and the Journal of the American Society for Information Science, March 1988 which had special sections devoted to IAIMS.

THE SECOND QUESTION IS, WHAT WERE THE PLANNING AND DEVELOPMENT GUIDELINES FOR IAIMS?

Because medical centres are so complex, a coordinated strategic planning effort to create an effective IAIMS system is required. The National Library of Medicine (NLM) provided an opportunity by establishing an IAIMS initiative to launch the program. Four institutions were originally selected for planning (Columbia University, Georgetown University, University of Maryland and the University of Utah). Georgetown was awarded a contract by NLM on September 1983 to conduct a comprehensive strategic planning study.

1. The first phase, to develop a strategic plan to implement IAIMS over a ten year period, was completed in 1985.

2. The second phase was the Model Development stage covering the period from 1985 through 1988. During this period Georgetown has been implementing the initial portions of the IAIMS plan.

3. The third phase is Implementation which we expect will cover the next five years, from 1989 to 1994.

The IAIMS concept has been well received in the general academic medical centre community throughout the U.S. Today, there are twelve institutions conducting IAIMS projects.

American College of Obstetricians and Gynecology

Baylor College of Medicine

Columbia University

Duke University

Georgetown University

Harvard University

Johns Hopkins University

Rhode Island Hospital

University of Cincinnati

University of Maryland

University of Pittsburgh

University of Utah

Although most of the IAIMS institutions are academic medical centres, one is a teaching hospital (Rhode Island Hospital - Brown University) and another is an association (American College of Obstetrics and Gynecology-ACOG). Each of the IAIMS institutions have chosen to emphasize a different aspect of information management. However, most of the IAIMS sites have involved the medical library in their planning and implementation process.

During the past two years, Georgetown has been asked by over 50 institutions for information about IAIMS. The medical centre library has been visited by over 400 individuals and has distributed approximately 600 copies of the Georgetown IAIMS Strategic Plan published in 1986 to interested individuals and universities. Most of the inquiring institutions seek information on how to accomplish the process of "pulling information together."

Canadian Health Libraries Association
Association des bibliothèques de la santé du Canada

FACT SHEET No. 2

Modems

What is a Modem?

A modem is an electronic device which converts, or *modulates*, data coming from a computer into audio tones which can be carried over normal phone lines, and *demodulates* incoming tones from the phone line into data that can be used by the computer. It is a means by which computers in remote locations can talk to one another and share information. A modem attaches between a phone jack and the computer's modem jack (a serial plug or connector) or can be a plug-in card which resides in the computer's system box. Since all data that resides in a computer, be it graphic, character, or sound, exists simply as a series of binary bits (zeros and ones), a modem can transmit data of any kind and convert received data into its original form. The modem simply sends the computer data as a serial string of bits and receives it in the same manner.

Speed or Baud Rate

There are two essential elements to consider when purchasing a modem: baud rate and Hayes compatibility. The *baud* rate is the data transfer rate or the speed at which data can be sent over the phone lines between computers. The rule of thumb here is, "the faster the better," since most services which are accessed by modem have time as an element in the cost formula. One also does not want to keep a computer tied-up for what may seem like hours to simply send a few pages of data.

The old standard of 1200 baud (roughly 120 words per second) is rapidly being replaced by 2400 baud modems which operate at double the speed under ideal conditions. (Baud rate is now more commonly referred to in terms of bits per second or *bps*.) When you consider that data moves inside computers at the rate of millions of bits per second this is still very slow and is the reason that as yet you see little transmission of graphics which typically consist of millions of bits per screen.

Modems transmitting data up to 9600 baud are available. However, there are no standards at this rate so that different brands of modems, both purportedly capable of this speed, can never really attain it over normal phone lines.

Speed of course comes at a premium price and whether or not you decide to purchase a 1200- or 2400-bps modem depends on the amount of data you need to transmit and the cost advantage you believe can be obtained when accessing expensive services.

Compatibility

Modems were originally not "intelligent." This meant that you had to dial a number manually, listen for the high-pitched *carrier-signal* of the other computer's modem, and then set a switch to the "connect" position.

A company called Hayes Microcomputer Products created the Smartmodem which includes a microprocessor and other electronics which allow it to respond to commands from, and send status reports to, a communications program. This ushered in the age of auto-dial and auto-answer modems and established Hayes as the industry standard. It is therefore important when purchasing a modem which is not a Hayes to ensure that it is at least Hayes compatible so that it fits well with established software and hardware

communications protocols. Some very reliable modems are manufactured by Hayes, Ventel and U.S. Robotics, the latter offering some of the least expensive models.

Communications Software

Without software modems cannot function. A communications program provides the capability to send what is typed on the screen or resides on a disk to the modem and to display the incoming data. But most programs go beyond this by adding commands that tell the modem to dial a number automatically, to transmit and receive files, to print and/or capture on disk, incoming files, or to view text that has scrolled off the screen. A good communications package will allow you to automate part or all of a communication session using a command script. These scripts can be saved and communications sessions with many different services carried out by using only a few key strokes. Popular communications programs for IBM compatible computers are *Smartcom* (Hayes) and *Crosstalk*. The Macintosh world tends to use *Smartcom*, or *Red Ryder* (FreeSoft).

Modems--Do I Need One?

More and more services are becoming available online and in many instances are only availalble in this form. The two most valuable at present are database services and electronic mail. To access these you need a computer and modem which connect you to the mainframe computers on which these services are located.

Electronic mail gives you the freedom to communicate anywhere almost instantaneously at your convenience and at very reasonable rates.

Databases allow you to find information, both bibliographic and otherwise, on a myriad of topics including medicine, nursing, social services and psychology. The information is more up-to-date than anything that can be found in printed indexes and abstracts are often included. Many large libraries are also making their catalogues available online so that someone in Manyberries, Alberta, for example, can almost instantly determine what books the National Library has or what journals are carried by the national science library, CISTI.

If you do not need to communicate efficiently at low cost and you do not need up-to-date information you do not need a modem.

Telefacsimile by modem

Recently several manufacturers have developed new modems which act as telefacsimile machines for the microcomputer. It is possible to scan text or graphics into your computer and then, using a fax modem, to send this to a telefacsimile machine at a remote location. Similarly, journal articles, etc. can be faxed to a microcomputer equipped with such a modem and the material stored to disk from which it can be recalled to the screen and printed at a later time.

Further Reading

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To deliver information across the campus, information and communications systems must be coordinated. Major sources of knowledge such as bibliographic databases, diagnostic and factual systems can be put in place to serve as a core medical decision support system accessible to use. These new sources are equal in magnitude to an information revolution focusing on library services. Its immensity makes it a very expensive undertaking.

The importance of the medical library in the new information environment has been recognized by the Association of American Medical Colleges (AAMC), the Association of Academic Health Centers (AAHC) and the NLM. Significant reports sponsored by these institutions emphasize the library as a logical hub for initiating the management of information. The Georgetown experience confirms the library as an important first step in the process of organizing and improving information management. In fact, the NLM planning tasks required participation of the library.

In the past, the library was perceived in a more passive position within the institution. Seldom was the library involved when administrators developed strategic plans pertinent to the institution's future. Today, the role is changing. The library is considered essential to the information chain. It is assuming a leadership role in planning information management and is an essential part of the institution's information team.

Well developed plans that incorporate the IAIMS concept are essential for the administration of a Medical Center Library and a Teaching Hospital Library. Everyone who has developed a long range plan knows that the process forces one to establish goals, objectives and time frames to accomplish desired outcomes. Innovative ideas emerge from brainstorming and planning. We must keep pace with modern state-of-the-art information centers. Therefore, we cannot afford to ignore long range planning.

THE THIRD QUESTION IS, WHAT APPROACH DID GEORGETOWN TAKE TO STRATEGIC PLANNING?

If you need ideas on where to begin, take a look at plans others have developed. Georgetown's plan is published and can be acquired. It is one of the first IAIMS plans developed and is useful for starting the planning process, gaining a global perspective and formulating ideas on pilot projects that can be undertaken. There is also a wealth of library literature on strategic planning that may be useful.

As I describe the Georgetown IAIMS plan and its Pilot projects, you will recognize how the process has taken us through a number of logical steps. One of our strategies was to reduce risks while pioneering in a new venture and to increase chances for success by undertaking pilot projects where we already had some experience. The basic plan was only a foundation for building the groundwork of our future projects and the prototype for a decision support system.

The strategic plan includes two major goals:

- Goal I - to improve academic information management and the transfer of biomedical information through an IAIMS;

- Goal II - to create a centre of excellence and IAIMS prototype to serve as a national resource for other interested academic health sciences centres.

Implementation is planned over a ten year period in three phases:

1. A pilot phase (one-three years), and
2. an interim phase (three-five years),
3. a full/long range phase (five-ten years).

Phases I and II involved acquiring start-up grants. We received two grants from NLM - a Model Development Grant and a Research Related Grant. We also received an equipment grant from AT&T which was later followed by a grant from Apple Computer Co.

THE FOURTH QUESTION YOU MIGHT ASK IS, WHAT WERE THE GRANT PROJECTS?

Phase I included providing major educational resources. We took a broad approach to build sources of knowledge such as databases to serve more or less as an "Electronic Textbook" or "Electronic Reference Tool". During this phase, Georgetown concentrated on academic program, education in the health professions, and the use of computers as memory extenders. To put a major educational program of this nature in place appropriate resources and tools were made available. In order to improve the learning environment it had to be easy for users to glean information from a variety of sources. This would enable users to gain basic knowledge more quickly and easily.

Georgetown implemented several bibliographic, informational and diagnostic databases to serve as a core support system for users.

The Bibliographic Databases include:

1. The Library Information System (LIS) online catalogue of books, journals and non-print holdings.
2. The miniMEDLINE SYSTEM™, Georgetown's user-friendly subset of the National Library of Medicine's MEDLINE SYSTEM. The miniMEDLINE database has been expanded to include 460 journal titles with article abstracts.
3. ALERTS™ CURRENT CONTENTS® search system, a database of references to the latest articles being published in the world's clinical and life sciences journals. This software written by the Library provides a similar user interface to miniMEDLINE.

The Information Databases, Factual and Knowledge Systems include:

4. A Drug Information System, the MicroMedex Clinical Computerized

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™ -The miniMEDLINE SYSTEM and Alerts are trademarks of Georgetown University.

® -CURRENT CONTENTS is a registered trademark of the Institute for Scientific Information Inc. (ISI).

Information System consisting of DrugDex, PoisonDex and EmerginDex.

5. Physicians Data Query (PDQ), the National Cancer Institute's (NCI) database for cancer treatment protocols. This system includes the latest chemotherapeutic data received from the nation's NCI designated Cancer Core Centers which includes the Lombardi Cancer Center at Georgetown.

The Clinical Diagnostic System includes:

6. RECONSIDER, a clinical diagnostic prompting system developed at the University of California, San Francisco. It is an experimental system made available largely to use as a teaching tool for medical students at the undergraduate and graduate levels.

These databases are available free, similar to LIS and miniMEDLINE, through support from the Dahlgren Library and the IAIMS grants sponsored by the NLM. Physicians and researchers can contact the Library's reference desk for dial-up codes and user information.

The databases are accessible through the IAIMS Local Area Network (LAN) which currently has over 400 connections linking offices in eight medical center buildings, including the University Hospital. A network-to-network link between the Hospital's LAN and the IAIMS LAN is currently being tested and evaluated. To make a workable decision support system of this nature, it is necessary to link databases in a transparent manner so users can switch from one system to another with ease and without cognizance of the technical complexity of the transfer mechanisms involved in the process.

In our IAIMS phase II research grant we began BioSYNTHESIS; an intelligent retrieval system that learns from the user and develops patterns for rapid transmission of information from multiple databases. To develop this type of system we are first installing the databases and studying user behaviour and information seeking patterns. Selected databases are being interfaced to the bibliographic system to complete the information chain. This allows users to conduct multiple database searches without re-keying search terms.

Departments are participating in a logical progression beginning with a "clustering" or mini-IAIMS approach. These units serve as experimental or model sites where basic concepts and strategies are tested before being fully implemented throughout the medical center. In the Medical School the project began with the Neurology Department and the Cancer Center. Recently work has begun with the Departments of Medicine and Pathology. In the School of Dentistry access to the IAIMS databases has been provided to three departments in the Dental Clinic. In the Nursing School emphasis is on providing resources to the faculty so they can utilize computers in classroom and lab teaching.

THE FIFTH QUESTION YOU MIGHT ASK ME ABOUT IAIMS IS, HOW ARE YOU TRAINING USERS?

To successfully begin an IAIMS program you must educate users so they can

benefit from the marvellous resources available to them. Training on use of the IAIMS network at Georgetown is provided by the newly established Biomedical Information Resources Center (BIRC) in the Library. Information access skills, use of computer based education programs and basic instruction on use of personal computers are provided by the BIRC staff. The center includes a large computer classroom, a general computer area and 4 conference rooms, with equipment to support special class assignments. There are over 50 computers of mixed variety: IBM, Apple, Macintosh and AT&T. Courses are given regularly, almost daily, and evening classes are arranged for departments.

User manuals for RECONSIDER, PDQ, and the Drug System have been developed to facilitate training classes and to help users become independent learners. The librarian and five staff who operate the center are working with faculty to encourage educational software development. More long range is an opportunity to conduct research and possibly to lend PCs to promising faculty for courseware development. For development and implementation of educational software, the School of Medicine and the Library have established a Clinical Informatics Center. Emerging from this joint venture are some pertinent and exciting Medical Informatics projects.

THE 6TH QUESTION IS, DO YOU HAVE SPECIAL EDUCATIONAL SOFTWARE?

PathMAC, an interactive laser disc project, designed at Cornell University Medical College is being transported to Georgetown. The Pathology course for medical and dental students has been automated with components for lecture notes, carousel pathology slides on laser disc with questions and answers, a clinical glossary and ClinicoPathologic Conferences (CPCs).

As an extension of the Scholars' Workstation concept, we developed a Practitioner's Workstation for the Neurology Department. From this idea emerged a Student Workstation project called the MAClinical Workstation. The project is designed to extend the students' clinical experience in recording history and physical findings of their patients by providing them with a means of automating their patient reports. Other phases of the MAClinical Workstation include interfaces to the IAIMS databases described previously, a MAIL-BOX system for faculty/student communications and improved instructional monitoring. In the future, we anticipate developing special simulated learning programs.

CONCLUSION

Now that I have answered a few questions, let me point out that information, in an endless variety, is needed everywhere: in the classroom, at the patient bedside, during rounds, at the laboratory bench, in the clinics, at home, or in the office. I need to remind you that what we are really doing is developing what can be called an "Electronic Textbook" consisting of basic reference tools and texts. Actual online texts are also within our future plans for IAIMS phase III and you will be hearing more about full text systems in the future.

As you can see, to develop the most appropriate resources, requires a closer cooperative venture with the schools and the hospital than an academic library has ever before experienced. The databases available through electronic means from remote sites, day or night, enable the physicians at our hospitals to stay abreast of medical discoveries and to make more complete, informed decisions about diagnoses and treatment. In addition, the information and knowledge resources can be used to teach clinical problem solving skills. Bringing the library to physicians and students is a useful way of adapting information technology to give our patients the best possible care.

Our IAIMS program goals will not be achieved overnight, but we are headed in what seems a logical direction. The medical library is the focal point of IAIMS activity. We believe the medical library of the 21st Century will be an Academic Information Management Library where numerous activities take place that involve using multiple formats of the world's medical knowledge base. Therefore, we are striving for excellence and building better sources of knowledge for our users.

LIBRARIES WITHOUT WALLS: BLUEPRINT FOR THE FUTURE A PERSONAL VIEWPOINT *

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Libraries Without Walls[1] was published in April 1987 and was the result of a study made by Mrs. M.A. Flower. This project was funded by CISTI and was administered by the Association of Canadian Medical Colleges (ACMC). Mrs. Flower had been appointed in September 1986 by a Project Committee consisting of representatives from CHLA, the Special Resource Committee on Medical School Libraries of the ACMC and the ACMC Executive Director. This Project Committee advised Mrs. Flower during the study and had the opportunity to comment on the various drafts of the final Report. The Committee consisted of Bernard Bédard from the Université de Montréal, David Crawford from McGill University, Dorothy Fitzgerald from McMaster University, Wilma Sweaney from the University of Saskatchewan, de Guise Vaillancourt from ACMC and was chaired by Ann Manning from Dalhousie University.

The Report is subtitled "Report of a Survey of Health Sciences Library Collections and Services in Canada". Though the Programme Committee has asked me to respond to the Recommendations, and I will do so, these come from the body of the Report. It is this body of facts and figures which gives the Report its strength and it is from them that other avenues of study will open up.

Two recommendations in particular come from the facts and figures in the report; these are recommendations 2 and 3 on Information Management Councils and Inter-library Loan. These were made because the Report clearly shows that times have changed since the days of the Simon Report.[2] Medical School libraries are better (or at least bigger) than they were then but not as good, or as well funded as they were in 1980. Money is tight; information and research is "exploding", but library budgets are not keeping pace. Both of these recommendations are really about cooperation as it is by cooperation that we can make our limited resources go further, and it is by an examination of existing structures that we may be able to improve them so that our users can have speedy access to their information needs as we approach the 1990s.

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* *Outline of the presentation given at the 12th annual meeting of the CHLA/ABSC, June 11-15, 1988 in Halifax, Nova Scotia.*

Recommendation 2 proposes that each university health sciences centre should establish an Information Management Council. This recommendation springs from the observations made by Mrs. Flower that there is an overlap between users of medical school libraries and users of the libraries of their affiliated hospitals. Not only do faculty members and researchers move between hospital and university offices and laboratories, but students move into hospitals at an early stage of the educational process.

This overlap of users has already been recognized by health sciences librarians who have organized formal and informal local networks. Though these networks have worked quite well in the past, the costs to be shared are becoming larger and larger. Librarians have been able to guarantee, at least for a few years, the continuation of a journal subscription. Can we also guarantee access to an integrated library system?

Librarians are, unfortunately, not at the policy making or resource allocation levels in either teaching hospitals or universities. As the costs to be shared become larger, it will become essential to involve those who are at this level. Hence the recommendation that senior members from each participating institution be involved. One would think of Executive Directors of teaching hospitals, Deans of Medicine and Directors of the University Library Systems, if the university health sciences library is a component of such a system.

What kinds of costs will need to be shared? An obvious development is the extension of the medical school's online catalogue to the libraries of the teaching hospitals and the inclusion in it of, at least, unique hospital library material. Such an expanded catalogue would certainly give users better access to available resources and would make resource sharing much easier, but a project like this requires long term commitment and a method of sharing the costs fairly. Once there is a unified online public access catalogue, it will not be long before it will also contain on-order information and information on circulation status. As distributed processing becomes more common and much cheaper, this does not mean that a centralized technical services needs to be created, but it does mean that standards must be set and common policies agreed upon.

Another, even more costly, area of possible cooperation will be the mounting of Medline tapes. These have been available from NLM for some time now and there are several ways of making them available to users. One can buy a separate stand-alone system such as Mini-Medline or one can mount the Medline database on one's existing online public catalogue. NOTIS Inc, which is the system used by McGill and Queen's has just announced a Medline module which will allow Medline tapes to be integrated into a library's own online system and other integrated system vendors are certain to follow suit. If a medical school library buys the Medline tapes, it is an obvious step to make access available to, at least, affiliated hospitals. (The NLM sales contract may not allow access by others not connected to the university.)

These decisions will have a far-reaching long term effect and must be fully supported by the resource allocations made in each participating institution. Unlike a journal

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* *Outline of the presentation given at the 12th annual meeting of the CHLA/ABSC, June 11-15, 1988 in Halifax, Nova Scotia.*

Recommendation 2 proposes that each university health sciences centre should establish an Information Management Council. This recommendation springs from the observations made by Mrs. Flower that there is an overlap between users of medical school libraries and users of the libraries of their affiliated hospitals. Not only do faculty members and researchers move between hospital and university offices and laboratories, but students move into hospitals at an early stage of the educational process.

This overlap of users has already been recognized by health sciences librarians who have organized formal and informal local networks. Though these networks have worked quite well in the past, the costs to be shared are becoming larger and larger. Librarians have been able to guarantee, at least for a few years, the continuation of a journal subscription. Can we also guarantee access to an integrated library system?

Librarians are, unfortunately, not at the policy making or resource allocation levels in either teaching hospitals or universities. As the costs to be shared become larger, it will become essential to involve those who are at this level. Hence the recommendation that senior members from each participating institution be involved. One would think of Executive Directors of teaching hospitals, Deans of Medicine and Directors of the University Library Systems, if the university health sciences library is a component of such a system.

What kinds of costs will need to be shared? An obvious development is the extension of the medical school's online catalogue to the libraries of the teaching hospitals and the inclusion in it of, at least, unique hospital library material. Such an expanded catalogue would certainly give users better access to available resources and would make resource sharing much easier, but a project like this requires long term commitment and a method of sharing the costs fairly. Once there is a unified online public access catalogue, it will not be long before it will also contain on-order information and information on circulation status. As distributed processing becomes more common and much cheaper, this does not mean that a centralized technical services needs to be created, but it does mean that standards must be set and common policies agreed upon.

Another, even more costly, area of possible cooperation will be the mounting of Medline tapes. These have been available from NLM for some time now and there are several ways of making them available to users. One can buy a separate stand-alone system such as Mini-Medline or one can mount the Medline database on one's existing online public catalogue. NOTIS Inc, which is the system used by McGill and Queen's has just announced a Medline module which will allow Medline tapes to be integrated into a library's own online system and other integrated system vendors are certain to follow suit. If a medical school library buys the Medline tapes, it is an obvious step to make access available to, at least, affiliated hospitals. (The NLM sales contract may not allow access by others not connected to the university.)

These decisions will have a far-reaching long term effect and must be fully supported by the resource allocations made in each participating institution. Unlike a journal

subscription, one can't reconsider participation in an integrated online database every year and unlike a journal subscription the first year costs tend to be the highest.

This "technological imperative" will start to become more and more important. Cooperation will no longer be able to be limited to providing cheap photocopies or maintaining subscriptions to benefit "the network". These enhanced networks will be built on the existing voluntary ones, but I have no doubt that as the costs being shared are greater and the services provided become more expensive, a greater involvement and a definite commitment by those who allocate the resources will become essential.

It is our job as health sciences librarians to ensure that the new network arrangements provide better service to our users and ensure speedy access to all available information at the lowest possible cost.

Recommendation 3 proposes that a committee should be established to study inter-library loans in the health sciences sector and this recommendation also deals with library cooperation. Until now, CISTI has been willing and able to accept all ILL requests sent to it and has managed to cope with this increasing load very well. Not only has the CISTI collection been strengthened as CISTI has taken over unique subscriptions, but the procedures for ILL at CISTI have been greatly speeded up. Not only with online ordering, and automatic call numbering of requests but also the air freighting of completed requests to regional delivery centres.

Though CISTI has done very well, and deserves both thanks and congratulations, it is unreasonable to expect them to provide all scientific and medical ILLs in Canada. It makes no sense for a request to be sent from Vancouver to Ottawa if the title is in the library next door.

At the moment requests are usually sent next door but this door is in danger of being slammed shut. ILL requests to other libraries, except those in a close knit network such as a medical school library and its affiliated hospital libraries, are normally seen as having much lower priority than service to one's own users. Health sciences libraries have historically served practitioners and other "community users", including pharmaceutical companies, but this sense of a health care community is not shared by most University Librarians, many of whom do not even see any reason to serve affiliated hospital users. Since almost all Canadian medical school libraries are part of a university library system, (the reverse is true in the US), the policies for interlibrary loan are being set by those with a different philosophy.

At McGill we are about to join many other research libraries and start charging for loans and charging more for photocopies. These charges are not being imposed to increase revenue but are to discourage demand.

ILL service is thus being reduced. Not only by this imposition of charges but also by the fact that medical school libraries (like academic libraries in general) have less to share. CISTI was not designed to be the Canadian version of the British Lending Library, but it is being forced in this

direction. It is very important that we look at whether this is a desirable direction in which to go when one considers Canada's geographic size or whether "regional resource libraries" should be supported as a cheaper and more efficient alternative.

REFERENCES

1. Flower MA. Libraries without walls. Report of a survey of health sciences library collections and services in Canada. Toronto: Canadian Health Libraries Association/Association des bibliothèques de la Santé du Canada, 1987.

2. Simon BV. Library support of medical education and research in Canada. Ottawa: Association of Canadian Medical Colleges, 1964.

SYDNEY LIBRARY AUTOMATION SYSTEM: ONE USER'S APPRAISAL *

Ken Ladd

Librarian
Toronto Institute of Medical Technology
Toronto, Ontario

I will focus on the four most important modules of the Sydney System: Cataloguing, Inquiry, Serials, and Circulation. The two modules I will not discuss in detail are Acquisitions and MARC Record Interface. Acquisitions provides control of ordering and indicates expenses incurred with respect to a budget. MARC Record Interface facilitates retrospective conversions or derived cataloguing. MARC records are downloaded from an agency, CD-ROM, or local source. After editing, the records are uploaded on to the Sydney database.

As with any sophisticated software package, Sydney represents large potential with associated limitations and problems. For each of the four modules I will discuss the potential, limitations, and problems that we have observed in our library.

CATALOGUING:

Potential

Cataloguing consistency is an important feature. Set fields are used to input cataloguing data which are displayed in a very consistent manner to patrons using the Online Public Access Catalogue. This consistency provides a sense of security for both staff and patrons.

Related to cataloguing consistency is the easy control of authorities that Sydney provides. A correction to an authority is reflected in the database for all records using that authority. Thus, a very consistent authority database exists, further enabling easy use of the system.

A variety of useful print materials can be generated: catalogues, both union and branch; inventory lists based on a variety of parameters (e.g. circulation status); acquisitions lists; labels; audit reports of library staff activity on title, authority, and inventory records; and statistics related to the audit reports (e.g. number of titles discarded).

Limitations

One limitation is the restricted ability to edit title records. Only title and text fields can be edited. All other fields are erased and rekeyed, which could result in further errors.

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* *This paper was presented at the 12th annual meeting of the CHLA/ABSC, June 11-15, 1988 in Halifax, Nova Scotia.*

Some libraries feel that cross references are poorly displayed. A search on an authority results in a list. Each line has a number to the left followed by an authority. Since cross references are not indented, it is not always obvious that you are viewing one.

Another limitation is the inability to browse the catalogue. Once a search is executed the hits can be browsed. No capability exists, however, for browsing through either the catalogue or the authorities as a whole.

Problem

The one problem I will mention is not related to the system itself but to an application. Retrospective conversion requires both time and money. It should also be noted that an ongoing requirement of time and funds exists for maintenance.

INQUIRY:

Potential

Quick comprehensive retrieval is an important feature. All searches are free floating unless otherwise specified. A search term will retrieve a title or authority regardless of where it appears within that title or authority. As well, Boolean AND/OR searching can be performed for many of the fields. Some fields are searched immediately upon entry (e.g. ISBN), or act as limiters for a search (e.g. year published). These features provide increased access to the catalogue.

Security is another feature of the system. Passwords exist for registered users, as well as a security level for inquiry. All catalogue records have a security level assigned. A record will remain hidden to a user during a search, if its security level is greater than the user's. As well, the inquiry screen for each security level is designed by the library. This enables the library to tailor the inquiry screen to the capability of its patrons.

Limitations

As mentioned with Cataloguing, there is no general browsing of the catalogue and cross references can be confusing. Also, a Boolean NOT search can't be performed. Finally, printing bibliographies from a search is an all or none situation. Any modification must be done using word processing software.

Problems

One major problem is the occurrence of duplicate hits during a search. If an OR search is performed where at least one of the subsets is quite large, duplicate hits can occur in your list. If you are printing a bibliography, it must be edited later.

SERIALS:

Potential

This module provides efficient and accurate management. Since it is integrated with the catalogue, an automatic updating occurs as issues are checked in. As well, there are a variety of management reports and statistics which are useful management tools (e.g. a list by subscription agent of renewals). Another important feature is the

ability to interface with a subscription agent to perform online renewals and claims. CANEBSCO has a functional interface, and SMS is in the testing stage.

Limitations

It is difficult to handle combined issues and some supplements. If two issues are combined, it is difficult to account for this on the system. Supplements which do not have their own unique number are also a problem.

Another limitation is that certain subscription fields can't be modified. If a subscription is marked non-routing, it can't be changed to routing. The subscription must be cancelled and entered again.

Problems

We have encountered two problems. The first problem is the incorrect changing of status. As first issues of some subscriptions were checked in, the display indicated that they were already received. An investigation revealed that most of our first issues were listed as received, including those for 1989. Our second problem is the rare omission of some claims from the claims list.

CIRCULATION:

Potential

This module provides efficient and accurate circulation records. The variety of statistics and reports can be used as collection development tools (e.g. a list of all books which have circulated greater than a specified number of times). Circulation can also be used to perform a physical inventory of the library's collection. As well, a variety of notices can be produced (e.g. reserves, overdues).

Limitations

For any library which includes a renewal as another loan, this statistic is lost. In fact, if the same patron borrows the same copy of a book before the circulation file is purged, the transaction will be considered a renewal. A second limitation is the inability of the system to handle fines.

Problems

A fairly minor problem is the incorrect formatting of activity statistics. We also have a number of periodic bugs (e.g., incorrect pointers between records). Book A's record indicates that individual B has it on loan. Individual B's record indicates that he does not have the book. These types of problems are very easily corrected.

CONCLUSION

It must be noted that the greatest potential of the system is its flexibility. Messages, authority types, text fields etc. can be added or modified to mold the system to individual needs. Granted this flexibility is limited, but enough exists to help each library shape the system to meet its own unique requirements.

Nominations for the CHLA/ABSC

AWARD OF OUTSTANDING ACHIEVEMENT

are now being received by the Board of Directors.

"To be eligible for the Award of Outstanding Achievement, a candidate must have made a significant contribution to the field of health sciences librarianship in Canada. The candidate's contribution must be of more than passing importance, interest, or local advancement. In addition, the candidate must fulfill at least one of the following:

1. *be currently registered as a member of the Association, OR*
2. *be currently employed as a health sciences librarian, OR*
3. *have been a health sciences librarian for part of a currently active career, OR*
4. *currently teach a formal course in health sciences librarianship, or have taught and made a significant contribution to the development of health sciences curricula."*

(Quoted from the **Canadian Health Libraries Association Executive Manual**, Appendix A)

Nominations must be made IN WRITING and mailed to:

Jan Greenwood, Past-President
Manager of Library Services
Ontario Medical Association
250 Bloor Street East, Suite 600
Toronto, Ontario M4W 3P8

Nominations must provide specific examples of the nominee's contributions to the field of Canadian health sciences librarianship. A *curriculum vitae*, including publications of the candidate, should be included. Nominations must be received by 1 February, 1989.

Nominations for

HONORARY LIFE MEMBERSHIP IN CHLA/ABSC

are now being received by the Board of Directors.

"To be eligible for Honorary Life Membership in the CHLA/ABSC, a candidate must have played an active role in the ... affairs of the Association, and fulfill the following:

1. *be at or near the close of an active career in health sciences librarianship,*
2. *hold a regular membership at the time of the nomination,*
3. *have made a significant contribution to the advancement of the purposes of the Association."*

(Quoted from the **Canadian Health Libraries Association Executive Manual**, Appendix B)

Nominations must be made IN WRITING and mailed to:

Jan Greenwood, Past-President
Manager of Library Services
Ontario Medical Association
250 Bloor Street East, Suite 600
Toronto, Ontario M4W 3P8

A *curriculum vitae* and a statement of the candidate's contributions to, and activities within, the Association must be included. Nominations must be received by 1 February, 1989.

PEOPLE ON THE MOVE

LINDA BARNETT has been appointed as Assistant Head, Technical Services in the Health Sciences Library, Memorial University. She graduated from Dalhousie's MLS programme in April 1988 and most recently worked in the Technical Services Division of the W.K. Kellogg Health Sciences Library, Dalhousie University.

ANN BARRETT is taking a two year leave of absence from the W. K. Kellogg Health Sciences Library, Halifax as of mid-September to be Acting Medical Librarian at the University of Papua New Guinea.

GEORGE BECKETT has been appointed as Librarian (Systems and Planning) in the Health Sciences Library, Memorial University. George graduated from McGill University in 1981 with his MLS. He previously held the position of Assistant Systems Librarian at Memorial's Queen Elizabeth II Library.

ELIZABETH HAWKINS BRADY, Reference Librarian at the Canadian Nurses Association, is Acting Library Manager from September 1, 1988 - August 31, 1989 while **LINDA SOLOMON SHIFF** is on a leave of absence.

LORRAINE BUSBY has been appointed to the position of Assistant Director of Libraries/Sciences Libraries, University of Western Ontario, effective September 1, 1988. Lorraine has been with the UWO Library System since June 1984 as Librarian - in - charge of the Engineering Library. From 1979 - 1984 she was in charge of 3M Canada's Technical Information Centre in London, Ontario.

ELEANOR HAYES retired from her position in the Library at Mount Sinai Hospital at the end of August 1988. She has been a long-time member of THLA and most recently she edited the 5th edition of the THLA Union List.

KIM ISSAC, until recently the librarian at Prince George Regional Hospital, in Prince George, B.C. has left that position to work at Fraser Valley College. She is succeeded by **THERESA PRIOR**, a recent graduate from S.L.A.I.S. Theresa has a B.Sc. in biology and studied medical and special libraries in her programme at S.L.A.I.S.

LANA KAMENNOF-SINE commenced her position as librarian at the Efamol Research Institute, Kentville, N.S. effective August 1, 1988.

ANNA LEITH, Head of U.B.C.'s Woodward Biomedical Library for 21 years, has retired. Anna started her career at U.B.C. as a reference librarian in 1959. She was appointed head of the Science Division in 1961 and in 1967 she was promoted to Head of the Woodward Library. She also served as a part-time lecturer at U.B.C.'s School of Librarianship (now S.L.A.I.S.) for 15 years. In recognition of Anna's long and noteworthy contribution to CHLA/ABSC's goal "to promote health and health care by promoting excellence in accessing information" she was awarded an Honorary Life Membership in the organization. She will be missed.

PENNY LOGAN, formerly librarian at the Izaak Walton Killam Hospital for Children in Halifax, is now planning and organizing a small branch public library in Cole Harbour, N.S.

LINDA ORDOGH was appointed Information Services Librarian at the Health Sciences Library, McGill University effective April 1, 1988. She has been employed on a sessional contract since September 1986.

CHRIS TOPLACK, formerly librarian at the Efamol Research Institute, Kentville, N.S. is enrolled in the first year of the medical programme at McMaster University, Hamilton.

NURSING INTEREST GROUP

Many of the most interesting conference events take place in the informal atmosphere of restaurants, bars and hotel lobbies. At the June CHLA annual meeting in Halifax three nursing librarians met over a lunch of lobster sandwiches, and as they chatted about common concerns and problems, the idea of a nursing interest group was born. The three were Mary Boite of the RNAO, Barbara Covington of the Montreal General Hospital, and Wendy Patrick from McGill, and they hope to be joined by other librarians with an interest in service to nurses. If you would like more information about the group, or if you have comments or suggestions to make, please contact:

Barbara Covington
Montreal General Hospital
Nurses' Library, Room 619
1650 Cedar Avenue
Montreal, P.Q.
H3G 1A4

IN MEMORIAM

KATHRYN M. SMITH

We were saddened to hear of the sudden death of Kathryn M. Smith of the Dr. Everett Chalmers Hospital in New Brunswick on July 1, 1988.

Kathryn was a long standing member of CHLA who ran as a candidate for Director in the most recent Executive elections. For the past 17 years she worked in hospitals in Ottawa, Thunder Bay, Winnipeg, and most recently, Fredericton in positions ranging from Health Records Administrator to Librarian. She was the New Brunswick liaison with the Maritimes Health Libraries Association and the New Brunswick Hospital Association's representative for the Library Assistant's Programme Advisory Committee at the University of New Brunswick.

In Ann Barrett's words:

> Kathy was one of the first hospital librarians hired in New Brunswick, and as such was often a source of advice and support for her more recent colleagues. She always had a word of encouragement and enthusiasm, tempered by her ever present common sense. As a librarian she will be very greatly missed in health library circles in New Brunswick and the Maritimes. As a friend she will be irreplaceable.

Kathy is survived by her father William J. Stryde, her husband Dr. Doug Smith, and her daughters Janice 10 , and Lizzy 5.

If desired, donations can be sent to the Forest Hill Rehabilitation Centre, 180 Woodbridge St., Fredericton, N.B. E3B 4R3

FROM THE HEALTH SCIENCES RESOURCE CENTRE

Maureen Wong

Head, Health Sciences Resource Centre
Canada Institute for Scientific and Technical Information
Ottawa, Ontario

It was a real pleasure attending the CHLA Conference in Halifax. I especially enjoyed the interesting and informative conference programme plus the opportunity to meet so many of you face to face. For those of you who missed the conference and the CISTI update, I am using this column to give you a synopsis of my presentation.

MEDLARS Network Services

	1986/87	1987/88	% change
databases	22	22	0.0%
subscribers	471	790	67.7%
connect hours	12622	13548	7.3%
hotline queries	609	909	47.7%
MEDLARS workshops	27	30	11.1%

Information Services

	1986/87	1987/88	% change
Literature searches	179	153	-14.5%
Guidance & quick reference	468	559	19.4%
Extended reference	426	542	27.2%
SDI activity	37	30	-18.9%
Total	1110	1284	15.7%

Currently 64 profiles are run on MEDLINE, TOXLINE, TOXLIT, HEALTH and CANCERLIT.

HIGHLIGHTS OF 1987/88

COURSES

- introductory MEDLARS courses were offered outside Ottawa
- out of 30 courses offered, 15 were outside Ottawa
- new one-day advanced course

SURVEYS

- list of Canadian MEDLARS Services offering search services to users external to their organization
- results of survey of MEDLARS search services

PROJECTS

Survey of Health Sciences Collections and Services in Canada:

- this project was completed by M.A. Flower in April 1987. An official CISTI response was prepared and presented to various interest groups.
- the report "Libraries without walls: blueprint for the future" was translated into French.

New bibliographies:

- GRATEFUL MED - Bibliography
- Personal computers for Online Searching: a bibliography.

Revised publication:

- Canadian Locations of Journals Indexed for MEDLINE 17th ed. (1988) now available for $36.00, quote NRCC 28887 to order.

DU CENTRE BIBLIOGRAPHIQUE DES SCIENCES DE LA SANTE

Maureen Wong

Chef, Centre bibliographique des sciences de la santé
Institut canadien de l'information scientifique et technique
Ottawa (Ontario)

Il nous a fait réellement plaisir d'être à Halifax pour la réunion de la ABSC. J'ai particulièrement apprécié l'intéressant programme de conférences et bien entendu de pouvoir parler à plusieurs d'entre vous en personne. Pour ceux d'entre vous qui n'avez pas assisté à la conférence et à la mise à jour de l'ICIST, je profite de la présente rubrique pour vous donner un aperçue de ma communication.

Services du réseau du MEDLARS

	1986-1987	1987-1988	% changement
fichiers	22	22	0.0%
abonnés	471	790	67.7%
heures de connexion	12622	13548	7.3%
questions "dépannage"	609	909	47.7%
cours	27	30	11.1%

Services d'information

	1986-1987	1987-1988	% changement
Recherches documentaires	179	153	-14.5%
Références rapides	468	559	19.4%
Référence approfondie	426	542	27.2%
Activités de DSI	37	30	-18.9%
Total	1110	1284	15.7%

Les fichiers MEDLINE, TOXLINE, TOXLIT, HEALTH et CANCERLIT comptent actuellement 64 profils documentaires.

FAITS SAILLANTS EN 1987/88

COURS

- des cours d'introduction à l'interrogation du MEDLARS ont été offerts à l'extérieur d'Ottawa
- des 30 cours offerts, 15 l'ont été à l'extérieur d'Ottawa
- nouveau cours de perfectionnement d'une journée

ENQUETES

- liste des centres du MEDLARS au Canada qui offrent des services de recherche aux utilisateurs ne faisant pas partie de leur organisme
- résultats de l'enquête sur les services d'interrogation du MEDLARS

PROJECTS

Enquête sur les collections et les services des bibliothèques des sciences de la santé au Canada:

- ce projet a été completé par M.A. Flower en avril 1987. L'ICIST a préparé sa réponse au rapport et l'a présenté au divers groupes intéressés.
- le rapport "Bibliothèque sans frontiéres: projet d'avenir" a été traduit en français.

Nouvelles bibliographies:

- GRATEFUL MED - bibliographie
- Ordinateurs personnels pour la recherche en direct: une bibliographie

Dépôts canadiens des revues indexées pour MEDLINE

Vous pouvez maintenant obtenir la 17e édition (1988) de cette publication au coût de 36 $. Prière de mentionner le n^{o} CNRC 28887 lorsque vous le commandez.

MEETINGS/WORKSHOPS

MARKETING AND INTRAPRENEURSHIP
Location: Queen Elizabeth Hospital, Toronto, Ontario
Friday, November 18, 1988

The Toronto Health Libraries Association is sponsoring a one-day workshop entitled **Marketing and Intrapreneurship** (otherwise known as Marketing the Library to Top Management). It is presented by RYA BEN-SHIR, Manager, Health Sciences Resource Center, MacNeal Hospital, Berwyn, Illinois.

This course is worth 9.6 MLA CE credits.

Course Fee: THLA Member - $50.00, Non-Member - $60.00
Retired/Unemployed Librarians - $30.00.

For registration and further information contact:

Susan Murray, President-Elect
c/o Dentistry Library
University of Toronto
124 Edward Street
Toronto, Ontario
M56 1G6
(416) 979-4372

OLA '88
MANAGING CHANGE
MARKETING SERVICES
COMMUNICATING WITH PEOPLE
Location: Royal York Hotel, Toronto, Ontario
Date: November 3-5, 1988

For further information, please contact:

Ontario Library Association
Suite 300, 100 Richmond Street East
Toronto, Ontario
M5C 2P9
(416) 363-3388

NEW PUBLICATIONS

The **Healthcare Management FORUM Gestion des Soins de Santé** is published by the Foundation of the Canadian College of Health Service Executives. The College is a personal membership association for healthcare executives in Canada committed to improvement in the practice of healthcare administration. Its objective is to provide a professional peer-reviewed journal that would make available critical thinking in the interface between theory and practice in healthcare administration.

The **FORUM** is published quarterly. Annual costs are $50.00 to Canadian addresses, $65.00 to addresses in the United States and $80.00 to all other addresses. All remittances must be in Canadian dollars. Further information will be supplied upon request to:

The Canadian College of Health Service Executives
17 York Street
Suite 201
Ottawa, Ontario
K1N 5S7
(613) 235-7218

McCarthy S. **Personal filing systems: creating information retrieval systems on microcomputers**. Chicago: Medical Library Association, 1988.

This softcover, 180 page book is intended to help researchers, scientists and physicians organize their books, journal articles, and other publications. It is a comprehensive guide to data management software and the creation of a bibliographic information system. $25 (U.S.) to MLA members, $32 (U.S.) to non-members. Order from:

MLA Order Fulfillment Department
919 North Michigan Avenue
Chicago, IL 60611

Credit card orders can be placed by calling (312) 266-2456.

Snow B. **Drug information: a guide to current resources.** Chicago: Medical Library Association, 1988.

A manual of approximately 240 pages which offers an introduction to pharmaceutical technology, legal and regulatory issues, and common problems in drug information provision. The book is intended for health educators, researchers, and practitioners, as well as students. $25 (U.S.) to MLA members, $32 (U.S.) to non-members. Ordering information as for the publication above.

A selected bibliography on family violence. Ottawa: Vanier Institute of the Family, 1988.

This 45 page collection was updated in 1988. It lists books and articles on a wide range of family violence topics, including adolescent abuse; child abuse and neglect; child sexual abuse; children of violent marriages; courtship violence; elder abuse; parental abuse; and sibling violence. Available for $2.50 from:

Vanier Institute of the Family
120 Holland Avenue
Suite 300
Ottawa, Ontario
K1Y 0X6

Health and social support, 1985. Ottawa: Statistics Canada, 1988.

This book is from Statistics Canada's General Social Survey, Analysis Series. It provides fascinating information on the health status of Canadians 15 years of age and older. As well as providing statistics, it offers analysis and discussion on a number of current and emerging lifestyle trends -- including cigarette smoking, physical activity and aging, and Canadians' self-ratings of their health. Catalogue No. 11-612E. $30.00. To order, or for more information, contact:

Publication Sales
Statistics Canada
Ottawa, Ontario
K1A 0T6
(613) 993-7276

Stone L. **Family and friendship ties among Canada's seniors.** Ottawa: Statistics Canada, 1988.

This study presents data and analysis on the fastest growing sector of our population, Canada's seniors, and their informal social support networks. It identifies to what extent seniors give and receive help and goes on to examine how family and friendship ties affect their overall well-being. Information is presented using age, sex and education as variables. Catalogue No. 89-508. $20.00. Ordering information as for above publication.

Nursing in Canada. Ottawa: Statistics Canada, 1988.

This new publication brings together a range of data on the characteristics of the nursing profession in Canada. Included are data on human resources, nurse registration, nursing education and faculty. Covering a four year period from 1982 to 1986, this book presents data on age, sex, education and employment trends. Catalogue No. 83-226. $10.00. See under **Health and support**, above, for additional ordering information.

VERSION FRANCAISE DE "1987/88 MEDLARS UPDATE"

La version française de l'article par M-L Veeken ayant parut dans la revue **BMC** v. 10(1), entitule **Mise a jour du MEDLARS 1987-1988**, est disponible gratuitement, en ecrivant à:

Centre bibliographique des sciences de la santé
Institut canadien de l'information scientifique et technique
Conseil national de recherches Canada
Ottawa, Ontario
K1A 0S2
(613) 993-1604
ENVOY: CISTI.HSRC

POSITIONS AVAILABLE

CANADIAN REHABILITATION COUNCIL FOR THE DISABLED

A national non-profit organization has the following contract positions open immediately:

Full-time

1) Librarian (MLS) - with excellent cataloguing skills, to manage a specialized rehabilitation health collection. Responsibilities include automation of the reference holdings (knowledge of dBASE III PLUS is an asset), research and responding to information requests/maintenance of associations/periodicals files and staff supervision. Preference will be given to a bilingual (English/French) applicant.

Part-time

2) Library Technician - to catalogue disability-related literature, according to special classification scheme requiring knowledge and judgement in subject matter. Other responsibilities include typing, maintaining records, statistics, compilation of bibliographies and on-line activities as directed by the librarian.

Please send curriculum vitae to:

Maureen Vasy
Director Project Development
Canadian Rehabilitation Council for the Disabled
Suite 2110, One Yonge Street
Toronto, Ontario
M5E 1E5

BAYCREST CENTRE FOR GERIATRIC CARE

Health Sciences Librarian required for Baycrest Centre for Geriatric Care, which includes an active teaching hospital, and a Home for the Aged. MLS from an accredited library school and experience in the field of geriatric care preferred.

Librarian to be responsible for one full time library technician and volunteers. Experience with automation of library services is essential. Salary commensurate with experience.

Contact:

Sarah Shiffman
Director of Education
Baycrest Centre for Geriatric Care
3560 Bathurst Street
North York, Ontario
M6A 2E1
(416) 789-5131, ex. 2466

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